

# Center for Community and Preventive Health

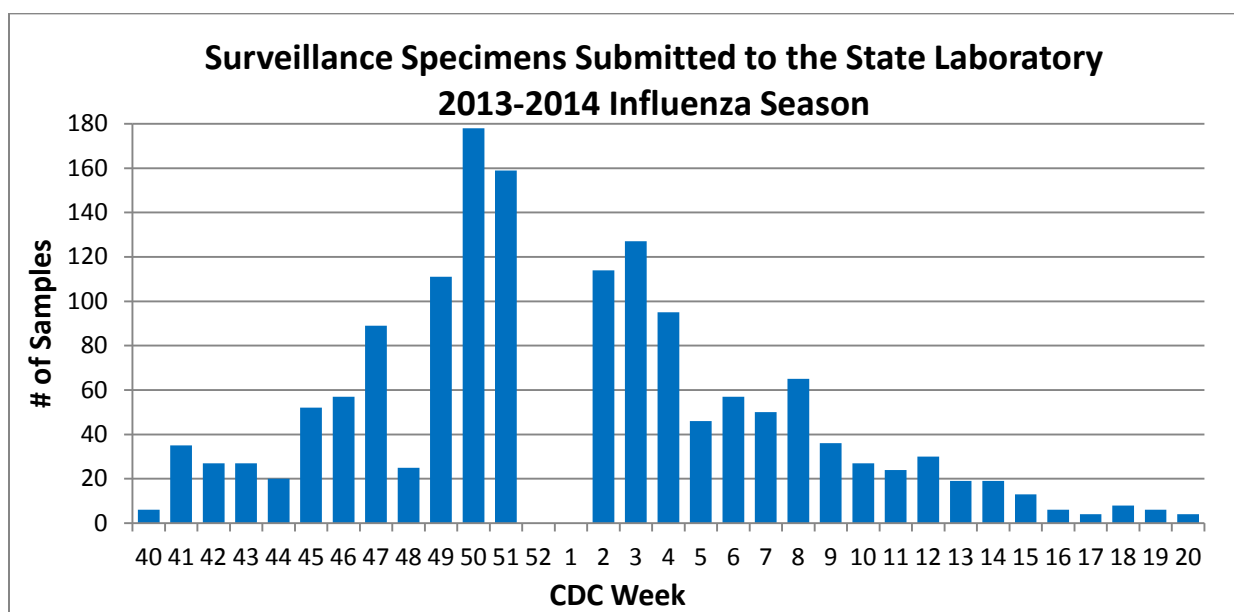
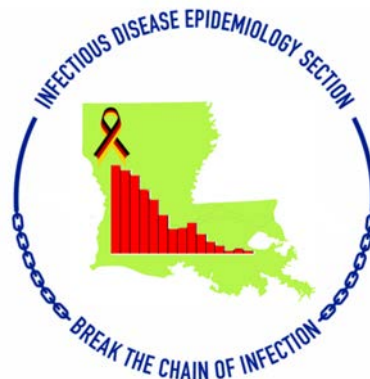
## Infectious Disease Epidemiology Section

### Influenza Virologic Surveillance Handbook

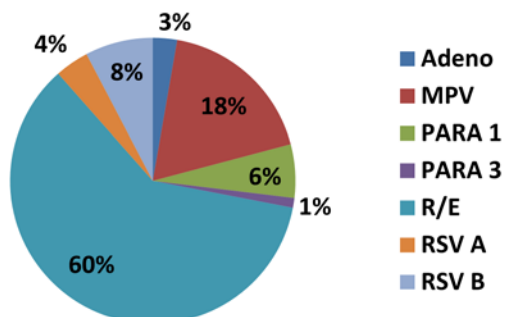
2014 - 2015 Season

Version 1.0

September 2014



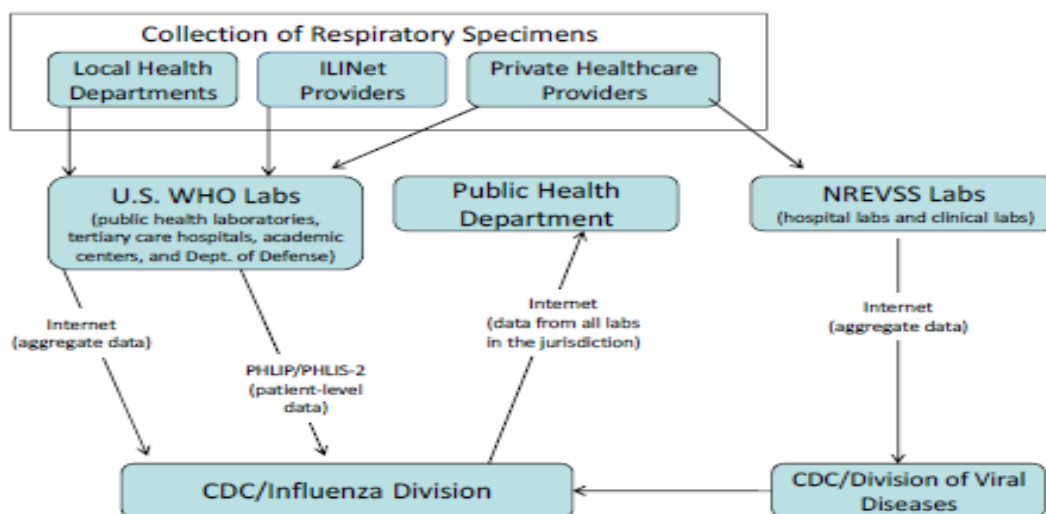
**RVP results from State Laboratory, 2013-2014 influenza season**



## I. INTRODUCTION

Virologic surveillance is the foundation on which national and international influenza surveillance systems are built. The goal of virologic surveillance is to identify and track drift variants of currently circulating influenza virus types and subtypes and to detect the emergence of novel influenza A subtypes in human populations. This information allows for monitoring of the match between vaccine strains and currently circulating viruses and selection of optimal vaccine components each year.

## II. DATA FLOW OF THE U.S. VIROLOGIC SURVEILLANCE SYSTEM



## III. LOUISIANA VIROLOGIC SURVEILLANCE

Beginning with the 2013-2014 influenza season, the goal is for the Louisiana State Public Health Laboratory to increase samples to meet requirements of the Association of Public Health Laboratories *Influenza Virologic Surveillance Right Size Roadmap*. The increase in sample submission will require regular participation from a core group of surveillance sites statewide. All materials required for sample collection and submission will be provided free of charge and transportation will be coordinated through Express.

Participation in active surveillance will require:

- Collecting a nasal or nasopharyngeal (NP) swab on **all patients** who present with clinical symptoms resembling influenza-like illness on any one day of the week (or more if the site is willing).
- Packing specimens in an ice chest with proper ice blocks (all provided) for Express pick-up.

**New for the 2014-2015 season, all influenza B positives will be further tested at the state public health laboratory to identify the virus lineage: Yamagata or Victoria.** A portion of flu positives from active surveillance will be forwarded to CDC for further antigenic characterization and antiviral

resistance testing. All **flu negative NP swabs** submitted will be tested for other respiratory viruses including Respiratory Syncytial Virus, Parainfluenza, Human Metapneumovirus, and Adenovirus.

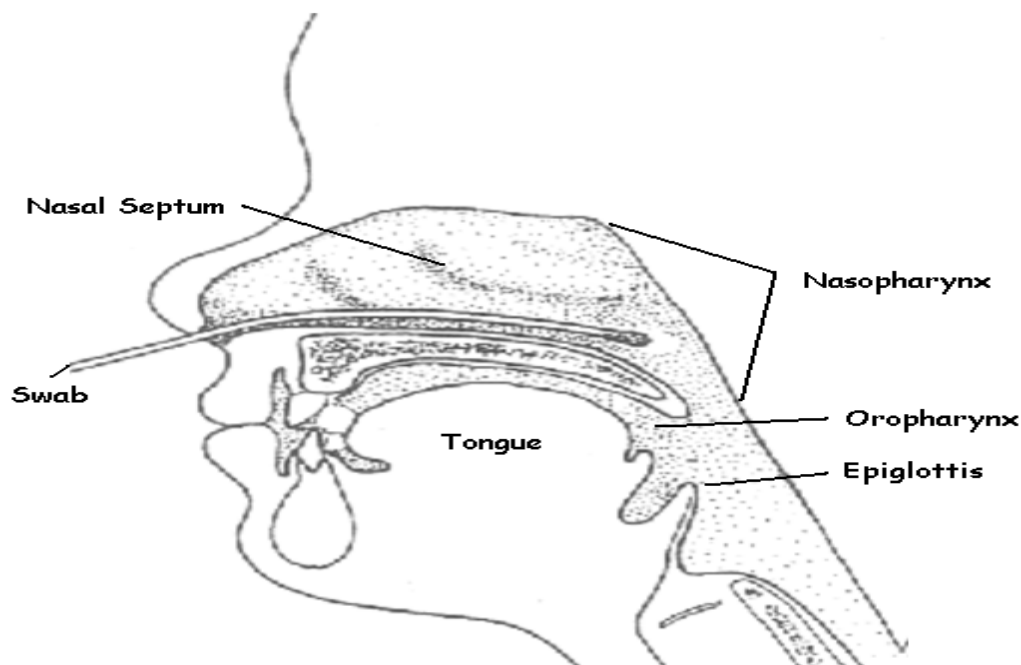
### A. Specimen Collection

Nasopharyngeal (NP) swabs, when collected by properly trained personnel are the optimal choice of clinical material. A nasal swab is an acceptable substitute and is the optimal choice for many participating sites.

Nasopharyngeal (NP) swabs

- 1) Optimal timing. Specimens ideally should be collected within 72 hours of influenza-like illness symptom onset (e.g. respiratory symptoms and/or fever) but are acceptable up to 5 days from symptom onset. Specimens should ideally be collected prior to the initiation of antiviral medications but are acceptable after the antiviral therapy has begun.
- 2) Materials. Nasopharyngeal swab (flexible shaft) with rayon tip, viral transport medium. All materials will be provided for participants.
- 3) Swab types. Swab specimens should be collected using only swabs with a synthetic tip, such as nylon or Dacron®, and an aluminum or plastic shaft. Calcium alginate swabs are unacceptable and cotton swabs with wooden shafts are not recommended.
- 4) Collecting the NP swab. Insert swab through the nares parallel to the palate (not upwards, Figure 1) until resistance is encountered or the distance is equivalent to that from the ear to the nostril of the patient. An instructional video from The Joint Commission on NP swab collection can be viewed at: <http://www.youtube.com/watch?v=hXohAo1d6tk&feature=youtu.be>

**Figure 1: Nasopharyngeal Swab Collection**



## B. Specimen Packaging

**Refrigerate specimens after collection. Ship specimens refrigerated to be received within 72 hours from collection.**



Use a collection kit containing swabs and viral transport media to collect flu specimen.



The swab on the left is for nasal specimens. The swab on the right is for nasopharyngeal.



After collection, place the swab in the tube of viral transport media.



Snap the swab shaft and cap the tube. Double check that your media is in date.



Put the date and time of collection on the tube along with the patient's name.



For each specimen collected, completely fill out a Lab Test Request Form 96.



Place each specimen in a separate compartment of the bubble wrap pouch.



Roll up the bubble wrap sleeve with the specimens. Tape the roll closed.



Each ice chest is furnished with two biohazard transport bags and absorbent strips.



Insert specimen roll into the long pouch. Pull off the liner and press to close.



Fold the lab forms in half and insert them into the outside pouch of the transport bag.



Freeze the ice bricks prior to use. Cover the bottom of the ice chest with one brick.



Place the transport bag with samples on top of the first ice brick.



Layer the second ice brick on top of the transport bag with samples.



Tape the ice chest closed. Ship ice chests overnight.

### C. Lab Test Request Form

Lab Form 96 – Virology needs to accompany all specimens submitted for testing. When you enroll as a participating site, you will be provided with a form with your site information pre-filled.

| Patient Information    |                   | Submitter Information  |           |
|------------------------|-------------------|------------------------|-----------|
| *First Name            | *Last Name        | *Facility Name         |           |
| *Date of Birth         | *Gender           | *Facility Address      |           |
| Patient's Home Address |                   | *City, State           | *Zip Code |
| City, State            | Parish            | Name of Contact Person |           |
| Medicaid Number        | Patient ID Number | Phone                  | Fax       |

(\*) INDICATES REQUIRED INFORMATION. INCOMPLETE INFORMATION MAY CAUSE SPECIMEN REJECTION.

| Specimen Information  |  |                                |       |
|---|--|--------------------------------|-------|
| Submitted Specimen Is From: <input checked="" type="checkbox"/> Human <input type="checkbox"/> Animal   |  |                                |       |
| *Collection Date:   | Time:  | If Frozen, Indicate Date:      | Time: |
| *Specimen Type:   | <input checked="" type="checkbox"/> Swab <input type="checkbox"/> Aspirate/Wash <input type="checkbox"/> Tissue <input type="checkbox"/> Viral Culture |                                |       |
| *Specimen Source:   | <input type="checkbox"/> Nasal <input type="checkbox"/> Nasopharynx <input type="checkbox"/> CSF <input type="checkbox"/> Blood                        | <input type="checkbox"/> Stool |       |
|   | <input type="checkbox"/> Oropharynx <input type="checkbox"/> Bronchil <input type="checkbox"/> Acute Serum <input type="checkbox"/> Vomitus            |                                |       |
|   | <input type="checkbox"/> Other <input type="checkbox"/> Trachea <input type="checkbox"/> Convalescent Serum  |                                |       |
| Additional Information: <input type="checkbox"/> Mother <input type="checkbox"/> Child <input type="checkbox"/> Follow-Up <input type="checkbox"/> Prenatal |  | Date of Symptom Onset: _____   |       |

*Phase Circle: Rapid test done Y N; if yes, Result A B Neg*

All tests listed may not currently be available. For questions regarding test availability, contact the Virology Dept. at 504-219-4676.

\*At Least One Test Must Be Requested

|   |   |   |
|---|---|---|
| <input checked="" type="checkbox"/> Respiratory Virus Panel*<br>RSV, Influenza, Parainfluenza, Metapneumovirus, Rhinovirus and Adenovirus | <input type="checkbox"/> Arbovirus Panel, IFA<br>SLE IgM, SLE IgG, EEE, IgM, EEE IgG, CE IgM, CE IgG, WEE IgM and WEE IgG | <input type="checkbox"/> Hepatitis A<br>Hepatitis A Total Antibody (Anti-HAV)<br>Hepatitis A IgM Antibody (Anti-HAV IgM)        |
| <input type="checkbox"/> Norovirus Real Time RT-PCR<br>Norovirus GI and GII   | <input type="checkbox"/> Arbovirus Panel, MIA<br>West Nile and SLE  | <input type="checkbox"/> Hepatitis B Panel<br>Hepatitis B Surface Antigen (HBsAg)<br>Hepatitis B Core Total Antibody (Anti-HBc) |
| <input checked="" type="checkbox"/> Influenza Real Time RT-PCR<br>Detection and Characterization  | <input type="checkbox"/> Maternal Serum Panel<br>HCG, uE3, AFP and Inhibin A  | <input type="checkbox"/> Hepatitis B Immunization (Anti-HBs)  |
| Epi Risk Factor <i>Influenza Right Size Virologic Surveillance, Sentinel Provider</i>   | <input type="checkbox"/> Other Testing<br>Herpes IgM<br>Herpes IgG<br>Lyme IgM<br>Lyme IgG<br>Lyme Total Ab               | <input type="checkbox"/> Hepatitis B Core IgM Antibody (Anti-HBc IgM)   |
|   |   | <input type="checkbox"/> Hepatitis C Total Antibody (Anti-HCV)  |
|   |   | <input type="checkbox"/> Rubella IgG <input type="checkbox"/> Mumps IgG   |
|   |   | <input type="checkbox"/> Toxo IgG <input type="checkbox"/> Vaccinia   |
|   |   | <input type="checkbox"/> CMV IgG <input type="checkbox"/> Varicella   |
|   |   | <input type="checkbox"/> Measles IgM <input type="checkbox"/> Other   |
|   |   | <input type="checkbox"/> Measles IgG  |

|   |                              |   |
|---|------------------------------|---|
| To Be Forwarded to CDC:<br>Contact 504-219-4646 for prior approval. | <input type="checkbox"/> Yes | Diagnosis Suspected:<br>Please include One CDC History form per specimen. |
|---|------------------------------|---|

Send To: DHH-OPH Central Lab, 3101 West Napoleon Ave., Metairie, LA 70001

**TO BE COMPLETED BY STATE LABORATORY**

LABORATORY NUMBER: \_\_\_\_\_ DATE/TIME RECEIVED: \_\_\_\_\_ TEMPERATURE CONDITION: \_\_\_\_\_



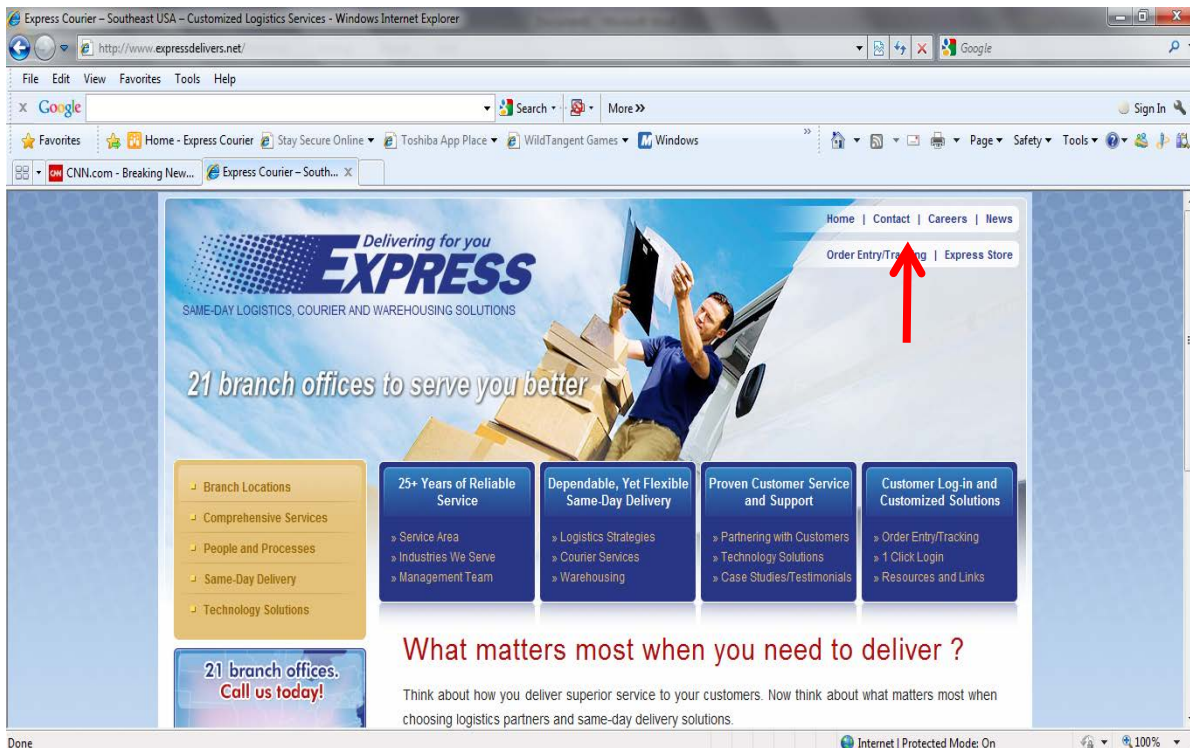
## D. Shipping Specimens



### *Instructions for entering orders online for Express Courier*

The purpose for online order entry is so you can track your deliveries online, but it will also send an email to our staff letting us know you have an order for delivery. This site is for On Call/Special order requests only. You do not need to enter your daily scheduled stops in this location.

1. Go to [www.expressdelivers.net](http://www.expressdelivers.net) and click on Order Entry/Tracking.



2. Then enter your User Name: **LAOPHLAB** and password: **influenza**

Internet Explorer  
Express Courier International...  
Express Portal Login  
Google  
Search  
Market Leaders... Self Service Portal Ariba Sourcing Date Duration Calculator Da... Compounding Pharmacies - ... Staples Advantage  
Home | Contact | Careers | News  
Delivering for you  
**EXPRESS**  
SAME-DAY LOGISTICS, COURIER AND WAREHOUSING SOLUTIONS  
Login  
Welcome Express customers. Please log in below. You will then be able to complete the Order Entry form and enjoy the convenience of tracking your pickups and deliveries.  
User Name: LAOPHLAB  
Password: .....  
Login Forgot Password  
MCAA ECA  
© 2010 Express Courier International, Inc. Toll-free: 1.800.800.9773 Site Map

3. Your screen will look like this:

Internet Explorer  
Express Delivers On-Demand...  
Google  
Search  
Self Service Portal Ariba Sourcing Date Duration Calculator Da... Compounding Pharmacies - ... Staples Advantage  
Home | Contact | Careers | News  
Delivering for you  
**EXPRESS**  
SAME-DAY LOGISTICS, COURIER AND WAREHOUSING SOLUTIONS  
Order Entry Order Status Reports Maintenance Logout  
On-Demand Order Entry Company: LA Office of Public Health Lab Welcome Danielle Haydel  
Name Danielle Haydel Phone (504) 219-4884 Email Danielle.Haydel@LA.GOV Acct # Select Account--  
Service Select Service-- Return Service Select Service-- Reference 1 Reference 2  
Pieces 1 Weight 1 Save Reference 1 Save Reference 2  
Ready Now Future Pickup Time AM PM  
Pickup Location Delivery Location  
Saved Address Select Address--  
New Address  
Name Address 1 Address 2 City State ZIP Contact Phone Ext. Instructions  
Add to Address Book Verify Address  
Notifications

4. The information that you first see will default to Danielle. You will need to enter your contact information in place of Danielle's including Phone and Email.

For the account number, please select one of the following – depending on which branch will pick-up/deliver your order request – see chart on item #6.

SHV-40112

BTR-45101

NOLA-48127

LAF-47088

The boxes with the red \* are required fields. In the Service field, you will need to select Standard 2 hour service if the facility is within 2 hours of closing, Express 1 hour if it is within 1 hour of closing, otherwise, you can select Economy 4 hour.

There should be no Return Service necessary. Unless you have a specific reference, these fields do not need to be completed.

Please list the number of pieces the courier will pick-up and if there is a weight other than 1 lb.

You can also select the Ready Now button and the time that you need the pick-up to be completed.

5. For the Pick-up Location box, you can enter a new location and save it to the address book or you can use an existing location. Several have already been entered. You can see the list by clicking the down arrow.
6. For the Delivery Location, follow the chart listed below. The daily On Call deliveries will be delivered to the local Express Branch (first) in order to be transported to the lab.

Please list any special instructions including temperature of the specimen, location of where the specimen will be, special parking instructions, and if there may be a different contact person. Basically, anything a courier would need to know in order to make a successful pick-up.

If you have a special/same day request for supplies, mail, or even a specimen that needs to go directly to a specific facility that same day, PLEASE note that in the instructions and select or add the location that it needs to go to. For example, the lab has supplies that need to go directly to a specific site on that same day, select the lab as the Pick-up Location and add/select the Delivery Location as the site that it needs to go directly to and put the notes in the Instructions box and fill out previous information in items 1-4. You can even add 'SAME DAY' in Reference 1.

| Site                                 | Express Courier Delivery Location Branch<br>(this also corresponds to the account number) | ECI Branch Manager | Branch Phone   |
|--------------------------------------|---|--------------------|----------------|
| Baton Rouge Area                     | 11965 Lakeland Park Blvd., Suite 100, Baton Rouge, LA 70809                               | Luis Crespo        | (225) 755-1997 |
| Morgan City, Lafayette, Lake Charles | 111 Sunbeam Lane, Lafayette, LA 70506   | Michelle Pitts     | (337) 237-7706 |
| Houma, Thibodaux, Larose             | 130 Riverbend Rd. St. Rose, LA 70087  | Jeffrey Donnes     | (504) 736-0731 |
| Monroe, Shreveport, Natchitoches     | 5201 Interstate Dr., Unit 3, Shreveport, LA 71109   | Harry Schad        | (318) 631-0861 |



7. Below the Pick-up and Delivery Locations Box is a Notifications. Within this box, select if you would like to have a Pick-up Complete notification, Delivery Complete notification and enter your email or phone number – however you would like to be contacted.
8. Once you are finished entering the data, select the Place Order button. This will complete the order and give you a confirmation screen. The order will then be sent to a distribution group within Express for notification of pick-up and delivery.
9. Should you have any questions about a branch's capabilities, please contact Luis Crespo at 225-963-0345 or Susan Moss at 205-568-7321.

### *Other options in eTrac*

Under Order Summary you will see Order Status and Order Search. Once you click on those, you can select specific criteria to get the information you need. The Order Summary will show a list of your orders for a specific date range. The Order Search will allow you to look for a specific order based on search criteria that you input.

Under Reporting you will see On Demand Order Summary. When you select this option, another screen will open.

You will be able to select Group By – the best way to do this is by account number. Then select the start date and end date. Depending on the type of report you need, you can select different options, even in the Group By field. Once you select your options, click View Report. It will take a minute to generate the report, but you will be able to see your report and our order number for it.

## **E. Sentinel Surveillance Site Feedback**

At the end of the season you will receive a site specific comprehensive report on influenza surveillance. This report will include:

- Information on ILI surveillance (if participated).
- Information on Rapid test result reporting (if participated).
- Information on virologic surveillance: contribution by site to surveillance, descriptive statistics, evaluation of rapid test with site and compared to other sites using the same and other tests.
- Information on other circulating respiratory viruses (if NP swabs are submitted).

